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JOURNAL OF THE WIRELESS INSTITUTE OF AUSTRALIA

JULY
1950

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EDITORIAL



MAGAZINE

Occasionally I take the opportunity to report to members the difficulties which arise in the production of your magazine.

Since the July 1949 issue, except for the past few months, every member throughout Australia received his or her magazine within a few days of the first of each month. This has been possible only by the prompt arrival of all Divisional notes by the 8th of each month.

I don't know if the strain has been too much for some correspondents for over the past few months, notes have been dribbling in up to ten days after the 8th. The nett result has been late delivery of the magazine.

I have many times stressed the fact that any notes arriving after the deadline will not be considered for publication, and if I had strictly enforced this policy there would, over the past few months, have been a number of offended correspondents as well as a large number of members to whom the correspondent is responsible.

I am quite well aware that the person who is held responsible, by the general member for the non appearance of notes, or the late delivery of the magazine, is the undersigned. Nevertheless, I believe I can take it and for the future, let it be plainly understood that Divisional and zone notes MUST be in my hands not later than the 8th of each month.

The 8th of each month has been agreed upon as a deadline, but there is no reason why notes if complete cannot be forwarded by the 1st or the 3rd as the case may be—the earlier they arrive the easier the task of producing the magazine becomes. Your Magazine Committee is an energetic and hard working Committee and anything which makes their task easier is very much appreciated.

To those of you who are always on time with your contributions, I offer my sincere thanks; to those who are perhaps a little slow please see that your notes are on time.

THOMAS D. HOGAN,
Editor.

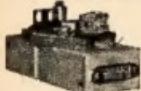
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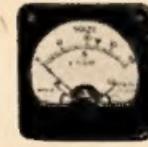


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DRIVING THE ZERO BIAS 807s

BY J. C. DUNCAN,* VK3VZ

Nowdays it is quite common to have a contact on phone and hear, "I am using 807s in zero bias as modulators OM," and find another convert to using our "Maid of all work," the 807, in a new job.

This is quite understandable, for used in zero bias, the 807 is completely tamed, and parasitics are non-existent.

For those who have not got access to the original article, it may be as well to run briefly over the circuit, shown at "A" in Fig. 1.

The centre tap of the driver transformer is grounded, and the ends of the secondary windings connected to the screens of the 807s. A 20,000 ohm resistor is connected between the screen and grid as shown, and the plates of the 807s are fed to the conventional modulation transformer. The cathodes of both 807s are grounded.

With this circuit, the driver transformer was the catch, as it had to match the driver tube to the grids of the 807s which had an almost constant impedance of 14,200 ohms, grid to grid. In addition, to obtain 120 watts of audio it was necessary to use a driver which would supply 5 watts of drive to the grids; this meant a pair of 2A3s or equivalent, after allowing for transformer losses, etc.

In our applications, 120 watts is not required, and therefore the most popular arrangement has been to use a 6L6G as driver, which allows us to obtain at least 75 watts of audio, and for lower audio requirements, a 6V6 or 6F6 was adequate. Obviously then, with zero bias 807s, the harder we drive them, the more we get out, up to their limit of 120 watts, provided of course, that our plate voltage, regulation, and impedance match are correct.

Ahead of the driver, we need the usual voltage stages to lift the gain from the microphone to give a voltage which will enable the driver to operate at its correct output. With a crystal microphone, this is about two stages, or with a carbon microphone, one stage would be adequate.

So much for the circuit as originally described, and now to the circuit described in February, 1950, "CQ," shown in "B" Fig. 1.

T1 is a conventional plate-to-push-pull input transformer, such as the type used to feed a 6CS to a pair of 2A3s; in other words, an ordinary voltage transformer (most of us have a transformer of this type lying about). The centre tap of the transformer is grounded, and the ends of the secondary fed to the grids of a 6SN7, which operates as two cathode followers. The cathodes are not grounded, but are connected as shown to the 807 screens and grids.

The plates of the cathode followers are tied together, by-passed, and supplied with 300 volts. The remainder of the circuit is the same as "A."

In August, 1948, "Amateur Radio" presented the latest circuit developed by R.C.A. for using the popular 807, as a zero bias modulator. Since then the 807 has been used in this application by many Australian Amateurs.

Here is a new method of driving the zero bias 807s which simplifies the problems associated with the original circuit.

Conventional methods of producing driving power in circuit "A" Fig. 1 would involve power consumption largely cancelling the power economy advantages of the Class B operation. Such power need be supplied to each grid only on its positive half of the cycle, however, the cathode follower driver is a natural.

Note there is no connection from the 6SN7 cathodes to ground, except through the grids and screens of the 807s. Thus the plate current flowing in the 6SN7s is equal to the grid and screen current of the 807s, and varies from less than 1 Ma. to peaks of 20 Ma. with voice modulation. Actually the total current of a 6SJ7 pre-amplifier, 6SN7 two stage resistance coupled triode amplifier, and the 6SN7 cathode follower stage totals less than 10 Ma. under static conditions. Since the driver section works on about 250 volts, its plate power as well as that of the two voltage stages is obtained from the one supply.

Actually the direct-coupled cathode followers supply approximately 10 volts of positive bias with resultant total static plate current on the 807s of 30 Ma. Of course with modulation, this

plate current increases to 80 to 150 Ma., depending on the output required.

The voltage stages required ahead of T1 are important, and it is necessary to see that sufficient voltage is supplied to the primary of T1, otherwise the power output from the 807 stage will be inadequate.

It is recommended that the minimum required from a crystal microphone would be: a 6SJ7 high gain amplifier, followed by two triode sections of a 6SN7 as resistance coupled triodes. In the writer's case the voltage stages used were:—

Pre-amplifier on operating table, 6SJ7 and 6J5 to 500 ohm line. 6SN7 as two resistance coupled amplifiers, feeding T1, cathode followers and then the 807s Class B stage. From the 500 ohm line, all other stages are in the main rack of the transmitter. With this line-up, the gain control is one-fourth on for 100% plate modulation of a 50 watt power amplifier, i.e. 25 watts of audio. The meter reading the combined plate currents of the 807s varies from a resting current of 30 Ma. to about 80 Ma. on peaks, which means that for 25 watts of audio, the 807s are simply loading along. The plate to plate impedance was 10,200 ohms, and the plate voltage 500 volts, rather poorly regulated.

With this circuit it is claimed that 60 watts of audio can be obtained, so it should be adequate for a 100 watt carrier.

The following plate to plate impedances for the 807 Class B stage are appended for readers who have not a copy of the original article.

Case	1	2	3
Plate Volts	750	600	500
Plate to Plate load	6650	5050	4000 ohms
Output	120	90	72 watts
Max. av. anode current (two valves)	240	240	240 Ma.

NOTE.—If the Class B stage is run at lower plate currents or voltages, the plate to plate impedance will be different. The calculations are very simple with the following method, which is accurate enough for our requirements.

In a Class B stage at any instant the grid of one tube will be driven positive and the other tube driven past cut off, and therefore in calculating impedances we need only consider one tube. As far as the one tube is concerned the primary of the output transformer is a resistance and therefore we have this plate load (R_p) and the resistance of the Class B tube in series across the power supply. We can assume that about 80% of the power supply voltage will appear across the plate load R_p as audio voltage, so if our plate supply is 500 volts, 400 volts peak of audio will appear across the plate load R_p . This gives us our voltage for calculation.

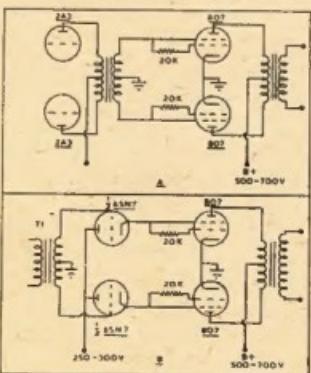


Fig. 1.

(Continued on Page 5)

* Technical Editor, 23 Parkside Avenue, Balwyn, Victoria.

SO YOU WOULD LIKE A.C.?

BY R. H. ATKINSON,* VK6WZ

Any war naturally brings in its wake movements of population and the last war was no exception. The effect the writer has observed in his own State must have been duplicated many times over in other parts of Australia, that is, Hams who pre-war lived in the City have moved to country towns, others who used to live in rural areas now have a City QTH on their cards. This is good for the country, as it prevents stagnation of population—but it's not so good for the Ham who, like the writer, "cut his teeth" on a.c. mains and now finds himself cursed with d.c.

He finds himself bitterly reflecting that de-centralisation of population is something for the idealists to prattle about, but something with very obvious snags when applied in practice to Ham Radio. The town of Geraldton, W.A., has a three-wire 440 volt d.c. supply with an earthed neutral, giving (sometimes) 220 volts between the outside leg and neutral, polarity with respect to earth depending on which side of the system one's house is connected to.

You may say, "Ahh! 440 volts of d.c.—no triodes, no rectifiers, a minimum of filter—what's the man beefing about?" But there's a catch to it. Pre-war, a well-known VK6, now living in the metropolitan area, resided in Geraldton and in the course of moving from one dwelling to another, had the local authorities connect the 440 volt mains up each time. The only additional accessory was one six-volt battery for heater supply, and he was set for plenty of DX.

Perhaps the municipal authorities have "had" Hams—or maybe their excuse of shortages of materials is genuine—suffice it to say that none of Geraldton's post-war batch of Hams can get the 440 volt supply. And, in the case of GEL and the writer, the two hundred and twenty stalwart volts, which leave the power house, lose from thirty to fifty-five of their brethren before reaching our shacks!

GEL (who should be coaxed into speaking of his own experience at a later date!) turned to the vibratory inverter method developed by Eric Cornelius (VK6EC) and got away from d.c. mains and their snags to the extent of being able to run the rig and a c.r.o. from a.c. The writer tackled the problem from the rotary converter angle and found it not without disadvantages, but nevertheless possessed of sufficient good points to be installed permanently till such time as the Geraldton mains are changed from d.c. to a.c. some time this year.

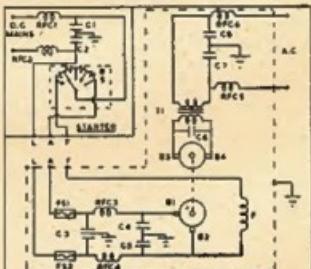
To any Ham living in a country town serviced by d.c. mains, I would sum up the position thus—

- (1) Is there any immediate possibility of conversion of town supply to a.c.?

We Hams who complain when our A.C. Mains Voltage drops a little should feel happier with our lot, when reading this article on the problems confronting the D.C. user and the eventual solution by VK6WZ.

- (2) Have you a small backyard with no opportunities for putting up high-gain arrays?
- (3) Is battery charging expensive to you?

If you can answer "No" to all the above, then stick to d.c., put 807's in push-pull in your final and go to it. If, on the other hand, the answer is "Yes" and, additionally, you can scrounge a rotary converter (or buy one if you're affluent), then I'd suggest you manufacture your own alternating current on the premises.



Rotary Converter Circuit with Switchgear.

The rotary starter's metal frame and cover are earthed but in the above circuit the no-volt release and overload trip are not shown. Dotted lines around converter represent steel case. Motor frame is, of course, also earthed.

C1, C2—0.1 uF. 600 volt.
C3—Dual suppression condenser, 0.5 uF. each side of earth.
C4, C5—2 uF. 400 volt rating.
C6—4 uF. 600 volt rating.
C7, C8—2 uF. 600 volt rating.
RFC1, RFC2—125 turns of 18 s.w.g. on 2½" former.

RFC3, RFC4, RFC5, RFC6—50 turns of 18 s.w.g. on 2½" former.
R.S.—Rotary starter switch.
FS1, FS2—10 amp. fuses.
B1, B2—D.C. brushes.
B3, B4—A.C. brushes.
F—Converter field.
T1—Step-up transformer.

Letters L, F, and A stand for line, field and armature.

* 150 Fitzgerald Street, Geraldton, W.A.

Choose as large a converter as your purse and your electric power account will stand. A small job, barely adequate for the demands of your equipment will pay off in terms of bad regulation, over-heating and kindred troubles. The bad regulation will be particularly acute when working c.w. Further, if you can, get hold of a machine made "from the frame up" for the purpose of power conversion—not a re-built electric motor.

A double-wound converter is best of all and keeps your d.c. and a.c. circuits isolated. At VK6WZ a single-wound machine is in use (not from choice) and it is necessary to use transformers between the slip rings and load for two reasons. Firstly, the a.c. voltage available is always less than the maximum d.c. voltage applied to the armature and, secondly, it is essential to isolate the load from the d.c. mains. With this machine running on d.c. mains, which measure about 170 to 185 volts, the slip ring a.c. potential is in the region of 115 to 130 volts.

Careful installation is essential if the system is to work with minimum interference to your own and neighbouring receivers. D.c. supply leads should be in earthed lead-covered cable. Plenty of filter should be applied to both d.c. and a.c. leads and the machine should be housed in a well-ventilated steel case.

If possible, get it away from the shack as far as practicable. The 6WZ converter is located on the back verandah, just outside the shack and no more than ten feet, direct line, from the receiver. Hardly an ideal set-up, but nevertheless, with the suppression employed, workable.

The writer imagines that if it were possible to instal the machine in the good-shed or wash-house and bury the d.c. and a.c. leads in water pipe, the arrangement would be entirely silent in the receiver, even on 28 Mc. As it is, reception on 7 and 14 Mc. is unaffected by noise while on 28 Mc., with the noise limiter on the receiver switched in, most worth-while signals can be copied OK. Indeed, on the forty metre band, un suppressed or partly suppressed domestic appliances in homes one hundred and more yards away make more noise than the converter, whose noise anyway is such as to make no difference to any signal, phone or c.w., which is copyable without the machine running.

Here an important point must be stressed. Standing waves on the feed system of the antenna in use for receiving, play a big part in determining whether clean or noisy reception is to be obtained.

If the antenna is a dipole or beam for the band on which one is listening and the feed line is properly matched, converter noise will be at an absolute minimum. On the other hand, if you use "just a piece of wire" for a receiving antenna, or attempt to receive 28

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BY DR. ALEX TAYLOR,* VK3AT

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The i.f. used is 2 Mc., the i.f. transformer being a 1,600 Kc. one with the iron slug well out of the coils.

The r.f. stage uses a 6SH7 connected as a triode with shunt neutralisation, the second r.f. stage being a grounded grid amplifier, in this case an EF50 with a bias resistor of 120 ohms. The screen and suppressor grids of the EF50 are connected to the plate, and the control grid is grounded. As usual, a shield is run across the bottom of the EF50 socket.

Capacity coupling is used between the first and second r.f. stages and it is found that the coil L4 is extremely uncrucial, 10 turns of 16 gauge enamel wire is used, although 8 and 16 turns all seem equally effective.

The mixer is another 6SH7 used as a pentode with control grid injection of oscillator voltage and grid leak bias.

The high frequency oscillator is another 6SH7 using the "Clapp" or "Steco" circuit and although the values of fixed condensers in the circuit are smaller than in the lower frequency versions of this oscillator, it is very stable and c.w. signals on 50 Mc. can be tuned in with ease.

The grid circuit of the oscillator tunes the range from 26 to 28 Mc. and the second harmonic (range 52 to 56 Mc.) is picked off from the plate of the valve.

The oscillator only is tuned in this converter. The first tuned circuit is broad, the second between first and second r.f. stages is very broad, and the mixer coil has a very sharp resonance point. An iron slug is used to tune this coil and when the point of resonance is

50 Mc. is found, the circuit is broad banded by shunting the coil with a resistance of 3,300 ohms, which seems to give a band-width of over 4 Mc. A resistor of 10,000 ohms gave a bandwidth of 1.5 Mc. approximately, but no apparent increase in sensitivity of the converter.

ALIGNMENT OF THE CONVERTER

The mixer output coil is first resonated to 2 Mc. by adjusting its iron core until maximum noise is heard at 2 Mc. in the receiver used as i.f. channel. The oscillator tuning range is adjusted first and by listening for it on a ten metre receiver, then, with the tuning condenser out of mesh fully, the padding air trimmer is set so that the signal falls on 28 Mc.

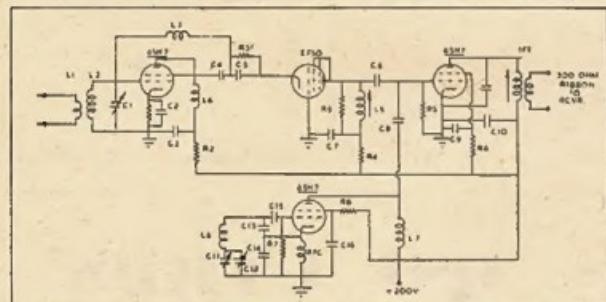
All that remains is to align the mixer and first r.f. coils. An absorption wave meter is handy here, to ensure that one is aligning the stages on the range 50-54 Mc. and not on the image.

Final adjustment is best made by listening to 50 Mc. signals and adjusting for maximum signal.

It will be found that the first tuned circuit is broadly resonant and the noise output of the converter seems to drop at resonance in this circuit.

The neutralising coil, L3, consists of 47 turns 22 gauge d.c. wire on a $\frac{1}{2}$ in former and requires no adjustment. One can play around with L4 for hours without improving matters. L5, the mixer coil, however, shows a sharp resonance point and can be broad banded as mentioned previously.

The conventional cascode converter uses a 6AK5 1st r.f. converted as a triode, and a 6J6 as grounded grid stage.



Cathode resistor of 1st r.f. stage (6SH7) is 120 ohms.

C1, C12—3-30 pF. air trimmers.

C2, C3, C5, C7, C9, C16—0.001 to 0.004 μ F, mica.

C4, C6, C15—50 pF.

C5—7 pF, ceramic.

C13, C14—200 pF.

C10—0.01 μ F, paper.

C11—25 pF, variable.

R1, R3—120 ohms.

R2, R4, R5—decoupling resistors, any value, 1,000 to 10,000 ohms.

R5—1 megohm.

R7—100,000 ohms.

R8—10,000 ohms.

R9—3,300 ohms.

L1—3 turns closely coupled to L2.

L2—4 turns $\frac{1}{4}$ in copper tubing $\frac{1}{4}$ in diam.

L3, L7—47 turns 28 gauge DCC $\frac{1}{4}$ in diam.

L4—10 turns 16 g. enamel $\frac{1}{4}$ in diam, iron dust core.

L5—6 turns 16 g. enamel $\frac{1}{4}$ in diam, iron

dust core.

L6—10 turns 16 g. enamel $\frac{1}{4}$ in diam. on ceramic former, winding length 2".

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These would be an improvement, but were not available at the time of construction of this converter and in any case the writer wished to use up some of the many 6SH7s in an I.F.F. Unit.

The 6SH7 is, however, not suitable in a grounded grid circuit as the suppressor grid is connected internally to the cathode, thus ruining any shielding brought about by grounding the grid of the valve.

There are special valves for grounded grid operation and when I can obtain one, results, whether better or worse, will be reported in this journal.

The choice of 2 Mc. as i.f. was made for the following reasons:-

1. The same oscillator and same tuning range are to be used in building a ten metre converter with 2 Mc. i.f. on the same chassis as this one.
2. Better conversion gain in the mixer stage is obtained by using a low frequency 2 Mc. i.f. than when using a high i.f. such as 10 Mc.
3. Images are 14 Mc. away and image interference from Amateur Stations is not experienced. Interference from strong local ten metre stations may occur, but is not a problem in this provincial city.

As in all v.h.f. receivers, lead lengths are short and point to point wiring and mounting of components is the most efficient.

The neutralising coil L3 is connected directly from the control grid pin of the first valve socket to junction of C4 and C5.

There is a small fixed condenser in the i.f. transformer connected across the

primary, this was removed and mounted on the socket of the mixer valve directly between plate and cathode. The values of C13 and C14 were arrived at by guess work and some experimentation here, if time were not so precious, would be advantageous.

L6 is wound on a 1" ribbed ceramic former, and the turns cemented in place with "Tarzan's Grip."

Earth leads and leads to C11 are rigid, 1" copper tubing being used here.

All coils in this converter are mounted underneath the chassis except L1 and L2 and also the 2 Mc. i.f., to avoid heat radiation from the valves.

A FEW HELPFUL IDEAS

When using a 6J6 as a mixer-oscillator or as a Clapp oscillator-buffer amplifier, use for the oscillator the triode section with plate pin No. 1 and grid pin No. 6. The other triode section (plate pin No. 2 and grid pin No. 5) has the getter assembly attached to the plate and is more subject to drift and microphonic troubles.—VK3AKZ.

Suitable springs to replace those in drill chucks can be obtained from old motor tyre valves.—VK2AC.

When carrying a multimeter, turn the selector switch to a high current range. The low resistance shunt across the meter is as good as shorting the leads together for heavily damping the meter and helping prevent bent needles and jarred movement.—VK3AKZ.

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Western N.S.W. Emergency Work

For a period of seven days from 4th to 11th April, Amateurs in the Forbes and Dubbo areas in N.S.W. were active in assisting the various authorities by supplying communication channels when other means failed. Without a doubt in the last two years Amateurs have had opportunities to assist in many disasters and they have grasped these opportunities on every occasion to demonstrate the emergency value of Amateur Radio.

The main portion of the work on this occasion was in co-operating with the Army who had a number of Army "Ducks" effecting relief in the area. During the whole operation approximately 400 messages were handled by Amateur Stations on behalf of the various authorities.

On the arrival of the "Ducks" in Forbes, a station was set up at the Town Hall to communicate with Army HQ. This station, manned by the Army, was also to be used for radio control of the "Ducks." On the morning of 4th April, Bill Kennedy, VK2BT, phoned Hugh Stitt, VK2WH, to say that the Army was having difficulty in contacting HQ and could he help? VK2WH then opened up on the 7 Mc. band and requested permission from official P.M.G. Station, VK2AA, to operate on 3830 Kc., the Army's frequency.

The town of Forbes itself was divided into three portions and the "Ducks" were busy in their rescue work in isolated areas, and communication with the "Ducks" was extremely important. Permission was granted and VK2WH's main transmitter was then tuned to 3830 Kc. and remained there for a period of seven days. A No. 11 battery-operated was used on the 7 Mc. band. The main transmitter was used as a link between the Army control station in Forbes and Headquarters and was also used to communicate with the "Ducks" when they were 70 miles away from Forbes.

Bill Kennedy, VK2BT, and John Marr, VK2AMV, in Forbes proper, were also active on both 3.83 and 7 Mc., and later in the operation the three stations worked shifts on the Army frequency of 3830 Kc. A 50 Mc. link between all three stations was in operation and afforded them a channel on which they could communicate without interference on either 3.8 or 7 Mc.

Quite an amount of traffic was also handled on the 7 Mc. band and VK2AA, official station, kept a continuous watch on the Emergency Frequency of 7002 Kc. and gave the Amateurs active every assistance.

The New Zealand 3.5 Mc. band extends to 4 Mc. and considerable trouble was experienced during the evenings with interference from ZL stations. After a message from VK2NS, requesting clearing of the frequency and the appearance of official monitoring station ZL3JT, on the following evening, 3830 Kc. was kept clear of interference.

Most of the emergency work was done on telephony and it was fortunate that stations participating were able to use

their main home transmitters. At one stage when the power failed at VK2WH, a request to VK2BT obtained a quick repair. It was typical of the co-operation afforded the Amateurs in their work. Many of the local people listened to the emergency working on 3.8 and 7 Mc. bands and in one case, a message concerning the feeding of some marooned stock was intercepted, and the stock fed before the message finally reached its destination. BCI was even forgotten in the desires of the local people to follow the story.

Later in the operation, two "Ducks" proceeded to the Warren area and after a call on the 7 Mc. band, VK2XP, of Dubbo, was asked to look after them, as it turned out Bob Bensley had been following them for two days and had the position in hand. Bob continued to solve the communication problems of the "Ducks" until the floods had subsided and they were no longer required.

CERTIFICATE OF SERVICE

It was pleasing to see Chas Pedell, VK2KN, as the recipient of a Certificate of Service from the N.S.W. Police Department, for his sterling emergency work during the Kempsey flood disaster last year. His assistant, Mervyn Harrison, also of D.C.A., received a certificate too. They were presented at the June meeting of the N.S.W. Division of the W.L.A.

Several interesting points were learnt from the operation and they could prove valuable for future emergency working of Australian stations.

The first concerned the polarisation of the signals and it was found that reception of the Army "Ducks," using vertical whip antennae, was extremely difficult using the normal horizontal half wave doublet. On changing to a vertical antenna, the signals from the "Ducks" rose a number of points. VK2WH used the vertical for working to the "Ducks" and the horizontal for communicating with HQ.

During the first days of the operation Amateur Stations were active up to 17 hours per day. Working for such long periods gave a good insight into the conditions prevailing on 3.8 Mc. and it was shown that the band each day at 1130 hours became practically useless and that a frequency about 6 or 7 Mc. should be available for use when this condition prevailed.

Conclusions could be drawn that a considerable amount of emergency work with mobile equipment could be done in the 3.5 Mc. band during daylight hours, but such gear should also cover the 7 Mc. band.

(Continued on Page 10)

IONOSPHERIC PREDICTIONS FOR THE AMATEUR BANDS

JULY, 1950

Nine of the charts, prefixed by the letter "C" for Canberra, refer to forecasts for the South-Eastern Australian States. The remainder, prefixed by the letter "P" for Perth, are for Western Australia.

The Canberra charts refer to the following world zones:-

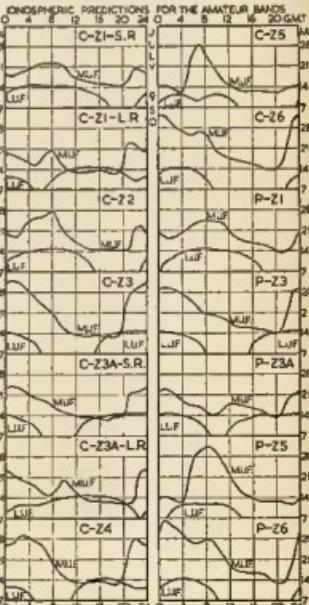
Zone	Region	Terminal
1	Western Europe	London
2	Mediterranean	Cairo
3	N.-West America	San Francisco
3a	N.-East America	New York
4	Central America	Barbados
5	South Africa	Johannesburg
6	Far East	Manila

QUIZ

The Prediction Service welcomes comments on the accuracy of its predictions. In particular, answers to the following questions on the Canberra-San Francisco circuit would be useful:-

1. Were good conditions experienced on 7 Mc. for the period 0600 to 1500 hours G.M.T.?
2. Was the 14 Mc. band workable between 1000 and 1800 hours G.M.T.?
3. Was the 28 Mc. band workable for several hours around midnight G.M.T.?

Answers to the Quiz should be sent to the W.L.A. and should, if possible, refer to consistent results obtained on the majority of days in the months.



VK-ZL INTERNATIONAL DX CONTEST, 1950

In announcing the rules for the 1950 VK-ZL International DX Contest, the New Zealand Association of Radio Transmitters, with the Wireless Institute of Australia, invite the participation of members to ensure the continued success of this Contest.

OBJECTS.—For the world to contact VK and ZL stations and vice versa.

WHEN.—

1201 G.M.T., 22nd Sept. to 1159 G.M.T., 24th Sept.	C.W.
1201 G.M.T., 29th Sept. to 1159 G.M.T., 1st October	Phone
1201 G.M.T., 6th October to 1159 G.M.T., 8th October	C.W.
1201 G.M.T., 13th October to 1159 G.M.T., 15th October	Phone

DURATION.—(a) VK and ZL stations for contest purposes will limit their period of operation to any consecutive 24-hour period on each week-end within the times given above. Once an operator commences operation, the operator will not exceed 24 hours of consecutive operation reckoned from such commencing time.

(b) In other countries, stations may contact VK and ZL stations at any time within the periods shown above.

RULES

1. There shall be three main sections to the Contest.

(a) Transmitting c.w.

(b) Transmitting phone.

(c) Receiving (phone and c.w.).

2. The contest is open to all licensed transmitting stations in any part of the world. No prior entry need be made. Mobile marine stations or other non-land based stations are not permitted to enter the contest.

3. All Amateur frequency bands may be used.

4. C.w. will be used for the first and third week-ends, and phone for the second and fourth week-ends. Stations entering for both phone and c.w. sections must submit separate logs for each.

5. Only one contact per band per week-end with any one station (for contest purposes) is permitted.

6. Only one licensed Amateur is permitted to operate any one station under the owner's call sign. Should two or more operators operate any particular station, each will be considered a competitor and must submit a separate log under his own call sign.

7. Before points may be claimed for a contact, serial numbers must be exchanged and acknowledged. The serial number of 5 or 6 figures will be made up of the RS (telephony) or RST (telegraphy) reports plus three figures which may begin with any number between 001 and 100 for the first contact and which will increase in value by one for each successive contact. E.g., if the number chosen for the first contact is 053, then for the second contact the number must be 054, for the third 055, and so on. If any contestant reaches 999, he will then start from 001 and continue.

8. SCORING.—Fifteen points will be scored for the first contact on a specific band with any overseas country (VK-ZL district for overseas stations), fourteen points will be scored for the second contact on the same band with the same country (VK-ZL district), thirteen for the third and so on to the fifteenth contact which will score one point. All contacts with that particular country (VK-ZL district) on that band will thereafter count one point each. This scoring procedure will be repeated on each band to encourage multi-band operation. There will be no VK-ZL contacts between each other. A.R.R.L. official countries list will be used. VK-ZL districts are VKs 1, 2, 3, 4, 5, 6, 7, 9, and ZLs 1, 2, 3, 4.

9. LOGS.—(a) Logs must show in this order:—Date, time in G.M.T., band of operation, call sign of station contacted, serial number sent, serial number received, points claimed.

(b) A separate log must be submitted for each band. For each band an analysis sheet must be given showing:—list of countries (VK-ZL districts) contacted with number of contacts and points claimed for each country (VK-ZL district) contacted.

(c) A summary sheet to show:—(1) station call sign, (2) name and address of the operator, (3) whether phone or c.w., (4) points claimed for each band, (5) grand total of points, (6) brief description of transmitter, tubes, power, antenna, etc.

(d) A declaration that all contest rules and regulations for Amateur Radio in your country have been observed and that the log is correct and true to the best of your belief.

10. The judges reserve the right to disqualify any station for (a) consistent tone reports under T8, (b) continuing key clicks, (c) phone splatter and/or overmodulation, (d) off frequency operation.

11. The ruling of the Executive Council of N.Z.A.R.T. will be final in the event of any dispute.

12. Overseas stations should call CQ VK-ZL and VK-ZL stations CQ Test.

13. **AWARDS.**—Attractive certificates will be awarded to the station returning the highest score from each particular country and each call area in the U.S.A. Additional certificates may be issued at the discretion of the Contest Committee. There will be no world winner. VK and ZL awards will be announced by the W.I.A. and N.Z.A.R.T. respectively.

14. Entries from overseas stations should be plainly marked on the wrapper, "VK-ZL TEST," and forwarded to reach N.Z.A.R.T., Box 469, Wellington, N.Z., by 14th January, 1951. Logs from ZL stations should reach the same address by 24th November, 1950, while VK logs should be sent to their respective Divisions by 24th November, 1950.

RECEIVING SECTION

1. The rules for the Receiving Contest are the same as for the Transmitting Contest, but is open to all members of

any Short Wave Listeners' Society in the world. No transmitting station is permitted to enter for the receiving contest too.

2. The contest times and the logging of stations once on each band per weekend are subject to the same rules as for the transmitting contest except that VK and ZL listeners may listen and log stations over the whole period of the contest. Logs will be in the same form as for the transmitting contest.

3. To count for points, the call sign of the station being called, the strength and tone of the calling station, together with the serial numbers sent by the calling station must be entered in the log. Points will be claimed on the same scale as for transmitting stations.

4. It is not sufficient to log a station calling CQ Test.

5. VK receiving stations cannot log VK stations, and ZL receiving stations cannot log ZL stations, but V.K.s may log Z.L.s and vice versa. Overseas stations will log only VK and ZL stations heard operating in the Contest.

6. Certificates will be awarded as in the transmitting contest.

N.S.W. EMERGENCY WORK

(Continued from Page 9)

Local authorities and Amateur stations co-operated fully in the operation. Of the latter, VK2GS, VK2WI operated by VK2VW, and VK2AMR, not forgetting the many other stations active, were of great assistance acting as guard stations and calling other areas.

The wives of the Amateurs, even with their own worries, assisted often to ease the burden. Mrs. Marr, wife of VK2AMV, for instance, for a number of days ran a receiver on 3830 Kc. and relayed any messages necessary to John. Both VK2BT and VK2AMV had their own personal flood problems early in the operation, but when the normal business of the town was suspended, they operated their stations full time.

VK2WH was isolated very early in the emergency and from then on was nearly full time in the shack, he has been flooded three times since Xmas and is getting a little tired of it all.

The sum total of Amateur Radio activity meant that food relief to the citizens and stock was expedited, as was rescue work and with it goes up another mark on the credit side for Amateur Radio.

Not long ago we read complacently of the emergency work of the American Amateur and with the rider that "it couldn't happen here," passed the matter of emergency organisation by. It has happened here—to be precise, eight times in the last eighteen months—so let us organise that we best perform a function of our hobby, that of supplying communication to those in distress.

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Abstracts from Overseas Magazines

R.G.B.S. "BULLETIN," OCTOBER, 1949

P. 104: "An All-Band Crystal Calibrator;" W. H. Allen, G9UJY—One Mc. crystal oscillator, 1000 and 10 Mc. multivibrators, harmonic amplifier and cathode follower for low impedance output. Gives 100 Mc. points up to 75 Mc. and 100 Mc. points up to 140 Mc.

P. 150: "Sample G.W.-Phone Monitor;"—For c.w. an audio oscillator whose h.t. is obtained by rectifying a small portion of the r.f. output of the transmitter. An o.s. phone, acts as a diode rectifier.

P. 107: "Simple Breakin' System;" J. P. Hawker, G8VA—Survey of proven systems. Full of information for those interested in working breakin'.

P. 111: "Instant Heating Soldering Iron;" J. Gilbert, G8DDE—A heating coil of 15 gauge copper wire which is heated by passing 1000 amperes directly through it. This current (at half a volt) is supplied by a small home-made transformer, built into the iron which is in the form of a pistol.

P. 111: "Carbon Microphones;" G. B. Brewer, G8LJG—Advantages of modern carbon microphones.

P. 115: "Some decisions affecting the Accuracy of Measurement;" J. E. Harris—General discussion on traps for young players.

P. 116: "The R.G.B.S. 420 Mc. Test;"—Full details of field day with details of all rigs used.

"SHORT WAVE NEWS," JANUARY, 1950

P. 8: "A 420 Mc. Superregen Receiver;" J. Taylor—RIG18 in quarter wave circuit tuned by variable condenser.

R.G.B.S. "BULLETIN," JANUARY, 1950

P. 214: "A Table Top Transmitter for the DX Bands;"—Compact 5 stage rig for 14, 21 and 28 Mc. final in parallel 807A.

P. 216: "W.M. Operation with Delayed A.V.C. Circuits;" R. Orton—Add an EA5B as an unmodulated rectifier.

P. 217: "Simple Sideband Transmission Applied to Amateur Telephony;" Part II; R. N. Hyde, M2ZHH—Details of phase shift transmitter and balanced modulator converter for the receiver.

P. 223: "Automatic Change Over;" F. W. Jeffreys, G8JMF—How to automatically change over when a switch is charged on keying and discharge through a sensitive relay. This will hold the relay shut for a 1/4 second before it changes over to the other contacts and changes circuit to receive.

P. 226: "Bright Ideas;" L. M. Gunnell, G8HR—(I) Home-made 515 socket; (II) An oscilloscope power supply; (III) Burnt out r.f. ammeter as milliammeter.

"HAM TIPS," JANUARY-MARCH, 1950

P. 20: "A Simple Code Practice Unit for the Novice;" K. Macmillan, G8PDE—A 1500 Mc. converter using push-pull audio oscillator.

P. 1: "Electronic Keying Systems;" M. Seybolds, W8VYL—Gives seven circuits which have been tried at various times. Latest circuit is for screen keying using a VR tube in series with the screen supply as the essential on-off element together with a pentode triode pair to provide the correct voltage causing the VR tube to conduct or not.

P. 4: "Simple Over Modulation Indicator;" G. Hatchett, 2E1BGT—150GT as negative peak rectifier which flashes a glow when it conducts. The filament of the 150GT is heated by the R.F. current to the r.f. final. Suggested using 8V4 diode connected in place of 150GT if h.t. is less than 600.

"SHORT WAVE MAGAZINE," FEBRUARY, 1950

P. 805: "Wide Range Heterodyne Frequency Meter;" F. Butler—Three valve circuit. Electron coupled r.f., 80 Mc. crystal oscillator.

P. 908: "Self-Considered QRP Portable Transmitter/Receiver;" A. P. Newport, G8CZX—40 metre dry battery t.r.f. receiver and c.a.o. trans. mixer.

P. 907: "H.T. Without Transformers;"—Methods of obtaining h.t. and filament supply direct from a mains. Not to be recommended.

P. 911: "G.P. Crystal Checker;" J. H. Jowett, G8CFB, and P. J. Townsend—Printed crystal oscillator for testing crystals, based on testing methods and frequency of crystals, while in operation.

P. 923: "C.R.T. Phone Monitor;" J. A. Flawson, G8JANT—Simple r.e.o. phone monitor in a very neat cabinet.

P. 926: "Testing the R.S.B. Transmitter;" R. C. Woodward, G8KJF—Testing and setting up of crystal filter type s.a.b. transmitter.

P. 928: "Another Top Band Tax;" O. T. Atkinson, G8ZQ.

P. 987: "Parallel-Fed Modulator;" D. E. Passfield, G8CHH—Saturation of modulation transformer by p.e. current by using an additional modulation choke.

"SHORT WAVE NEWS," FEBRUARY, 1950
P. 32: "A Two Valve Receiver for 145 Mc;" A. R. Tunstall, G8EGL—9002 superregen detector, 6C5 audio.
P. 34: "Seventy Centimetres;" Part I: Major Cycle—Introduction and methods of frequency measurement

R.G.B.S. "BULLETIN," FEBRUARY, 1950
P. 252: "A 498 Low Power Transmitter;" J. L. Jackson—A simple transmitter section using 1.75 Mc. v.l.o. electron coupled internally to beam section which doubles to 3.5 Mc. Five watts input to beam without ill effects.

P. 258: "Communications Receiver Design;" D. H. Higginson, G8DPE—The best article ever to come from this distinguished author on the design of a communications receiver. If you are going to build a receiver, read this article first. This description of the development of the Dennis DC1219 is full both technically and descriptively.

P. 260: "An Electronic Keyer;" B. Brundum-Nielsen, G8ZTR—Although not completely electronic, as it uses two relays, this device for producing automatic dots and dashes appears simpler and easier to get going than the usual ideas on this subject.

P. 261: "In the Workshop;" Domex—"The technique of soldering.

P. 263: "Bright Ideas;"—(I) Stabilizing the 818 by inductive neutralization; (II) Improving selectivity with out-board i.f. stages.

"QST," MARCH, 1950

P. 11: "A Beginner's Four-Tube Superhet Receiver;" D. H. Mix, W1TWS—6SG7 converter, 6SN7 1500 Mc. k.c. oscillator, 6S97 to 14 Mc. Aerial grid circuit can tune either 1000 Mc. k.c. above or below oscillator, thus covering 80 and 40 metres with good bandspread but without changing coils. The a.m. detector has a 100 ohm load giving two more ranges by retuning the local circuit.

P. 18: "Incandescent Light Flasher;" R. E. Stande, W5CKY—How to get over the light blanking when high power is keyed.

P. 21: "A 1500 Mc. Transistor with Low Pass Filters;" Part II; G. Grunberg, W1DFP.

P. 28: "Crystal Controlled Oscillators;" C. V. Chambers, W1JXQ—Results of lots of tests on 6AG7, 6PG7, 6AG97 and 616 in triest, grid plate, and mod. plate Pierce circuits. Found that: (I) Screen voltage regulation is essential to good keying; (II) The 6AG7 is by far the best tube type from every stand point; (III) The triest gives the most output with 6AG7 in Pierce circuit second; (IV) Mod. plate current is easiest on crystals with grid plate currents; (V) Unless a 6AG7 is used it is not advisable to tune any oscillator for maximum output because a slight change in circuit conditions may cause frequency shift; (VI) Plate circuiting gives less chirp than cathode keying.

P. 34: "A 1500 Mc. Transistor with the Newton;" E. P. Tilton, W1HDQ—Part II. Transmitter 624 Mc. oscillator-doubler, 630 tripler, pair of 6464 push-pull parallel final p.a.

P. 40: "Clamp" Tube Modulation;" B. Goodman, W1DPE—How to fit screen modulation of p.a. final using a clamp protection tube. Very suitable for 807s.

P. 50: "Adjusting Antenna Coupling on Receivers;" H. E. Cross, W1OOP—Adjusting for lowest noise figure is not necessarily a guarantee of best performance.

P. 52: "Mints and Kinks;"—(I) Two improvements in clamping elements to boom in all metal bands; (II) Simplified LO calculations; (III) Code Practice Oscillator; (IV) Simple h.e.l. cure; (V) Frequency counter parts made; (VI) Direct reading dial for the HRO.

P. 54: "TVI Trap;" G. Grunberg, W1DFP—1534 used as a simple v.h.f. mixer with a grid dip oscillator as a local oscillator and communications receiver tuned to i.f. Serves as a simple yet sensitive receiver.

P. 80: "The World Above 50 Mc;"—(I) Automatic band scanning gadget used by W2ZHL; (II) On tripling to 420 Mc., which tubes will, which won't.

"QST," APRIL, 1950

P. 11: "A Constant Modulation Phone System;" G. R. Lipsett, W8YHK—The p.e. is modulated in the usual manner except that there is no d.c. voltage on the screen. Instead, portion of the modulator output is rectified and used for the screen supply voltage. Thus the screen voltage increases and decreases with the average speech level, maintaining a high percentage modulation.

The low quiescent current in the r.f. final should be useful for portable work.

P. 13: "Simple Transmitter for the Beginner;" D. H. Mix, W1TWS—Really needs an expert to design a simple heterodyne group transmitter. Here is one designed by one, 6AG7 c.o. driving 616 or 6V6 p.a. Gives suitable a.s.d.

P. 26: "Coupling Unbalanced to Balanced Lines;" C. T. Bailey, W3UZC—LO networks for coupling say 500 ohm twin lead to 75 ohm co-ax. These

networks are broad enough to cover an amateur band.

P. 28: "Welding Aluminium with a Blow Torch;" H. H. Washburn, W3TME.

P. 28: "Electron Gun with Low Pass Filter;" Part III; G. Grunberg, W1DFP.

P. 34: "Key Clicks and Receiver Bandwidth;" B. Goodman, W1DPE—Methods of eliminating key clicks and how they are affected by bandwidth.

P. 38: "The New Receiver for the Novice;" Part III; E. P. Tilton, W1HDQ—Modulation, power supply and control unit.

P. 48: "50 Years of Progress, A Report on Amateur Radio;" Larson E. Rapp, W1ORP—This noted author's usual 1st April offering.

P. 58: "A High Frequency Crystal Filter;" R. L. Loveland, W1ZMB—Between converter and 8 Mc. receiver, a 8 Mc. crystal filter is used. Circuit similar to standard 1/4 crystal filters.

P. 64: "Hints and Kinks;"—(I) Something new in matching devices for coupling coax to beams; (II) Torque protection for rotary beam antennae; (III) "Clamper" tube troubles.

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50 Mc. AND ABOVE

Compiled by J. K. Ridgway, VK2CR

There is a severe shortage of news of v.h.f. doings this month due undoubtedly to an equally severe lack of activity on the bands.

The only DX item of interest concerns a short operating K3Z on Monday, 10 May, from 1310 hours V.H.F., 180Q RIM and SGR contacted VK4CH. Signals were not the best, peaking to 8T at times with plenty of QRM. It is understood that VK4 is also worked VK2s on the same date, but no report is to hand at the time of writing.

VICTORIA

Due to the cold weather, activity on this band has been on a somewhat reduced scale this month. A new station is 3ZJ of Parkdale, who is putting out a good signal from a single 107 with 30 watts into a 1/2 wave dipole. He is working the local band after 1700 hours, and a 3 element was been built and put into service on the 27th of May, but no contacts have been reported yet. With the exception of the 3M1's and 3P1's reported, there will be a few openings and some interesting contacts made. Interstate stations are reported that 3BQ has CQ on c.w. at 1900 and 1600 most days.

WESTERN AUSTRALIA

A new signal has been reported on six metres this month, that of 9EW Fremantle. Harry's transmission was heard on Bassendean by 6BO. However it is believed that 9EW is now building another set for 10 m. and we hope to work him soon. He may become one of the "regulars" on the band. Harry might be mentioned that any new signal is welcome on six. There is plenty of room for everyone and this band is ideal for cross town QSOs.

Nothing elaborate is really needed to get on six, and a good signal is relatively easy. An H.F. cat board for 1st at least I think. Harry's 6 watt cat and rotator dipole is putting out quite a respectable signal. It will eventually be a mobile affair for ion and ion, where the installation in the car can be simplified.

Of the country stations on six, 8G8 and 8DW are still the most consistent signals into Perth. Contact can rarely always be made on c.w. and sometimes conditions peak sufficiently to allow phone to be copied.

8AS is using a new converter (ex-VKAU) and results obtained are very satisfactory indeed. The converter uses a 7173 r.f. and 635 mixer oscillator with output on 7 Mc. 8H8 is now putting out a very good signal on six, and appears to have the best drive problem system. Work well.

Stations active on six at present are as follows:

6BO, 8FO, 8G8, 8DW, 8H8, 8NL, 8DD, 8AN, 8DU, 8WQ, 8OB, 8EC.

Don't forget the weekly round-up on Monday evening fellows.

VICTORIAN 144 MC. JOINTS

This band has been quiet for the same reasons as 80 Mc. and 100 Mc. signals have had minimal amateur activity on the band. New stations are 3A1X using 652 gear and SADI using push pull T100s as a cavity coupled oscillator. 3ZD, at Warragul, 60 miles east of Melbourne, has a 3 element beam and will probably be the Melbourne station with some DX contacts. 3AKM, of the same town, is also getting ready for the band and should be before long.

3TII has been operating from his portable location at Yallourn on Sunday afternoons and has been providing some interesting contacts with Melbourne stations. Signals vary a great deal, being quite strong and steady on some occasions and weak and fading badly on others.

IMPORTANT

Would all Magazine Contributors please note that all contributions must be addressed to "Law Court Chambers," 191 Queen St., Melbourne, and NOT to the old box number.

Contributions, particularly notes, if addressed to the box number may not be received in sufficient time to be included in Magazine for the month for which they are intended.

285 Mc. WORK IN WESTERN AUSTRALIA

8FO and 6BO have been doing some very t.b. work on 285 Mc. and report terrific signals between Cottesloe and Bassendean (about 12 miles). 8FO (Frank) is using a pair of C76s and a four element parasitic array, whilst 6BO (Rolo) uses a pair of 7193s and a four over four beam.

No news from the 144 Mc. gang, but will hope to have some news of this band for inclusion in next month's notes.

288 AND 576 Mc. ACTIVITY IN VICTORIA

5ARY, SATP, SADU, and SED, all of Essendon, are active on 288 Mc., using modulated oscillators and superregen receivers and are getting good signals over the four mile non-line of sight distance involved.

On 576 Mc. the only two active appear to be 3A1X and 3QO, who have been doing a great deal of experimenting with antennas and are getting good signals over their four mile non-line of sight distance. New or renewed activity from old would be appreciated.

KEEP THIS LIST OF VALUABLE COMPONENTS NEAR YOU!

Belling Lee type L138, twin flat line 72 ohm impedance, per 65 ft. coil,	18/6
Belling Lee type L600 70 ohm co-axial cable	per yard, 2/2
Belling Lee type L1221 70 ohm twin co-axial cable	per yard, 2/5
Belling Lee transmitting and receiving serial kit	complete, 65/-
Belling Lee type L333 "T" piece Ceramic insulators. The only type for terminating line at a dipole	6/3
Belling Lee type L530/L531 5-pin plug and socket assembly	10/-
Belling Lee type L560/L551 5-pin plug and socket assembly	7/5
Other types of Multi-Connectors available shortly.	
Belling Lee type L1033/C4 twin cartridge fuse holders. Takes standard car type cartridge fuses	9/5
Belling Lee type L1045/C3 single cartridge fuse holders. Takes standard car type cartridge fuses	6/9
Belling Lee type L356 panel mounting cartridge fuse holders	5/4
Belling Lee type L575 miniature of above	3/1
Belling Lee type L580 "Carod" stainless steel car aerial	39/6
Belling Lee Co-Axial Cable Connectors:-	
Type L604/S chassis mounting female	2/3
Type L642/P to fit L604/S	2/7
Type L1266 chassis mounting male	6/9
Type L1250 female to fit type L1266	8/-
Type L1287 chassis mounting female	5/6
Type L1250 female cable extension	3/2
Type D1259 male connector to fit L1287 and L1250	8/-
Belling Lee type L514 silver plated plug pins. These fit the standard banana sockets and are ideal for constructing your own plug-in tank coils.	
Rated to carry 15 amps	1/4

WRITE ENCLOSING 14d. STAMP FOR BELLING LEE CATALOGUE FREE!

Bulgin type K314 hand-wheel knob 11" diam.	2/-
Bulgin type P38 ceramic insulated phone-jack plug	5/-
Bulgia type J2 open contact phone jack, panel mounting	2/6
Bulgia type J12 closed circuit metering phone jack	3/4
Bulgin d.p.t. panel mounting silver plated contact switch with ON-OFF finger plate	8/6

FURTHER STOCKS OF INTERESTING BULGIN COMPONENTS WILL BE AVAILABLE SHORTLY.

Universal moisture-proofed foot or hand stand microphones	24/17/6
English Ceramic 232 sockets	14/6
Ferranti 0-500 microphone, meters with luminised dial	£2/2/8
Metro-Vickers English 0-40 volt 2" square meters	Resistance 8,000 ohms, 19/6
Metro-Vickers "Electric" 0-1 Ms. 2" round meters	£1/9/6
Metro-Vickers 0-20 volt DC 200 ohm/volt 2" square meters	19/6
Amphenol Steatite 5-pin valve sockets	3/6
American Tuning-Sol G55 tubes	18/6
American RCA 8012 v.h.f. triodes. Full rating 80 watts to 500 Mc.	65/-
American type J4 light weight morse code keys	10/-
A. & R. voltage regulated power supplies, 200-230-240 volts 40 to 80 cycles.	
Output 150 watts at 20 Ms., 6.3 volts at 1.5 amps. Uses 6X5GT rectifier VR150/30 regulator. Designed to power the Bendix Freq. Meter. Ideal also for low power pre-amplifier stages. Price, less tubes, £5/9/8	
Silver panel Transfers in the following separate designations: Aerial, Earth, AC power, ON OFF, Microphone, Pick-up, High Tension, Phones, Speaker, 12345 6789 10, ABCDE, Tuning, Tone, Volume, Wavechange, 50 ohms, 200 ohms, 500 ohms, 600 ohms, High, Pre-amp, Input, Output, Equalizer, In Out, Record, Playback, Standard, Orthocoustic, Frequency, Hertz, Amp., Vert. Amp., Gain, Focus, Intensity, Int. Ext., Sync., Shift. Each word repeated five times	41d.

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DX C.C. LISTING

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VK3EFT (8)	...	37	184
VK3EFT (9)	121
VK3EFT (10)	114
VK3EFT (11)	113
VK3EFT (12)	113
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VK3EFT (14)	102
VK3EFT (15)	100
New Member —		...	100
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VK3EFT (6)	...	40	175
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VK3EFT (20)	...	38	128
VK3EFT (21)	...	109	
New Member —		...	

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VK3EFT (17)	...	39	129
VK3EFT (18)	...	36	159
VK3EFT (19)	...	39	137
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New Member —		...	
VK3EFT (34)	...	38	109
VK3EFT (35)	...	38	195

WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcast.

VK3WI—Sundays, 1100 hours EST, 7196 kc. and 2000 hours EST, 56.4 Mc. No frequency checks available from VK3WI intra-State working frequency, 7176 kc.

VK3WI—Sundays, 1100 hours EST, simultaneous on 8266 and 7196 kc. and re-broadcast on 56.4 and 144.12 Mc. bands. Extra State required frequency, 7126 kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

VK4WI—Sundays, 0900 hours E.S.T. simultaneously on 3748 kc., 7196 kc., 1484 kc., 52.4 Mc. and 144.12 Mc. Frequency checks are given two nights weekly and the time of broadcast varies due to time differences between stations. 7065 kc. channel is used from 1900 to 1930 hours each Sunday as VK4WI query service to VK4WI.

VK5WI—Sundays, 1000 hours EAST, on 7196 kc. Frequency checks are given by VK5WI by arrangement only on the 7 and 14 Mc. bands.

VK6WI—Sundays, 0830 hours WEST, on 7196 kc. No frequency checks available.

VK7WI—Second and Fourth Sundays at 1800 hours E.S.T. on 7196 kc. No frequency checks are available.

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STANDARD FREQUENCY SERVICE

A Standard Frequency Service, similar to that in operation by WWV in Washington, D.C., and WWVH in Honolulu is now being operated by the National Physics Laboratory at Teddington, England, on an experimental basis.

The frequencies in use are 8 and 10 Mc. and may be heard at the following times: 8 Mc., 2.41 p.m. to 4.15 p.m.; 10 Mc., 4.15 p.m. to 6 p.m. E.A.S.T.

FREQUENCY ALLOCATIONS

The following is a list of the bands available for use by the Amateur Service in Australia, followed by the types of emission allowed on those bands:

5 to 5.5 Mc.	2. 3, 2a, 6P2.
7.0 to 7.2 Mc.	Mc-A1, 2, 3, 6P2.
14.0 to 14.4 Mc.	2. 3, 2a, 6P2.
28.0 to 27.32 Mc.	Mc-A1, 2, F.M.
50.0 to 50.5 Mc.	2. 3, 2a, 6P2.
100.0 to 105.0 Mc.	2. 3, 2a, 6P2.
200.0 to 230.0 Mc.	2. 3, 2a, 6P2.
2000 Mc. and higher	1. 2, 3, 2, F.M., Pulse.
288 to 296 Mc.	2. 3, 2, F.M., Pulse.
576 to 585 Mc.	1. 2, 3, 2, F.M., Pulse.
1215 to 1300 Mc.	1. 2, 3, 2, F.M., Pulse.
2300 to 2460 Mc.	1. 2, 3, 2, F.M., Pulse.
3500 to 3640 Mc.	1. 2, 3, 2, F.M., Pulse.
10000 to 10500 Mc.	1. 2, 3, 2, F.M., Pulse.
20000 to 23000 Mc.	1. 2, 3, 2, F.M., Pulse.
20000 Mc. and higher	1. 2, 3, 2, F.M., Pulse.

Note—6P2 emission represents a maximum deviation from the quiescent frequency of plus or minus 3 kc.

GENTLEMEN'S AGREEMENT

As a result of item 20 of the 1929 Federal Convention, all Amateurs are requested to refrain from using phone between 7000 kc and 7058 kc. Remember the gentlemen's agreement please.

COMMERCIAL INTERFERENCE

How many Amateurs are there in that complain of commercial interference from the various Bands? Have you made a written report of your observations? If not, why not now. Send your report to your Divisional Council for transmission to F.E.

UNIFORM PHONETICS

The need for the use of a uniform phonetic alphabet is long overdue. We have made representation to the I.R.E. for an expression of opinion to be obtained from all Radio Societies throughout the world, with the result that the result was unanimous.

ALTERATIONS

VK2AB—H. S. Watson, 87 Wardall St., Petersham.

VK2AH—H. E. Trevena, 188 Old Kent Rd., East Dulwich.

SATO—R. O'Rourke, 4 Cooper St., Warswong.

ZAZI—B. Woods, 26 Hibiscus Ave., Randwick.

VK3PD—G. D. P. Clarke, 601 Toorak Rd., Toorak.

RS2RN—G. P. Lee, 8 Hutchinson St., Sunshine.

BADY—W. Williamson, 30 Westgate St., Oakleigh.

3AOB—R. Burrows, o/o J. Lake, 16 Swanston St., Geelong.

SARD—R. E. Poynter, 7 Ryde Pde., Nth. Balwyn.

2AFN—F. J. Morris, 107 Station St., Sunshine.

VK4IO—M. A. Griffiths, 3 Upper St., Toowomba.

4LB—L. G. Baker, 12 Edward St., One Mile, Ipswich.

HAWK—H. Hawke, 218 St. Leonards St., North Sydney.

SKW-A—H. V. Yeoh, 208 Vaughan Ter., Berri.

5ND—H. E. Bell, 113 Brighton Rd., Dove.

5NM—M. N. Mayer, 8 Palmyra Ave., Torrensfield.

6TP—P. McR. Robson, L.R.W.E. Hospital, Salisbury.

VK3DM—M. J. Elsper, Madingley, T.N.G.

9PF—P. T. Flynn, Norfolk Island.

Amateur Radio, July, 1950

3MZ—8 Beaconsfield St., East Preston
STD—15 Calabria St., Hawthorn
8XY—15 Glen Iris Rd., Kewtown.
8ZW—(Lot 12), Mackie St., East Bentleigh
SAH—28 Harrison St., Deer Park.
SAJ—129 St. Kilda Rd., South Geelong.
SAY—15 Elman Rd., Cheltenham.
SAOC—275 Malvern Rd., Prahran.
SAR—14 Wylde St. East St. Kilda

VK4AB—61 Avenue, Palm Beach, Elanora P.O.
4AC—91 Avenue, Palm Beach, Elanora P.O.
4CB—113 Churchill St., Maryborough.
4CH—“The House,” Grindel St., Warwick
4D—P.O. Box 145, Cheltenham.
4DV—196 Edith St., Aspendale.
4HO—c/o Edith Bryan Hotel, Cr. Free and
Gerring Streets, Newmarket.
4MP—St. Albans Rectory, Cottam
4RT—1000 St. Kilda Street, Holland Park, Brisbane.

VK4CD—Kenwick
8GP—112 Magill Rd., Trinity Gardens
50P—Night Club, Northern Territory
5SV—101 Napier Terrace, Westbourne Park

VK6FL—174 Woolcott Street, North Perth.
6RD—c/o 6 AM, Northam.

VKTMG—149 Newby Bay Road, Hobart
7WV—“Fairways,” Esplanade, Belgrave.

VK9MC—Salter River, Central New Guinea.

Declarations—

VK3CD—Cancelled
4D—Cancelled
4A—Cancelled
5ANP—Cancelled, now operating under SAOP
VK3PO—Cancelled
NSN—Cancelled, re-allotted to G. P. Lee.
NWU—Cancelled
JAR—Cancelled
5ATH—Cancelled

VK4DG—Cancelled
4F—Cancelled
4L—Cancelled, now operating under 5AZL
VUHGRP—Cancelled, now operating under 5PF.
6WX—Cancelled,
VK7PH—Cancelled
77A—Cancelled, now operating under 5PD.
VK9AT—Cancelled
9VB—Cancelled

FEDERAL QSL BUREAU

RAY JONES VK3RJ, MANAGER

The Northern California DX Club writes under date of 20th March, 1950: “A serious threat to our amateur interests has been made by the A.R.R.L. and other American organizations have recommended to the F.C.C. (U.S.A.) that the present 10 metre Amateur band frequency allocation for phone be changed. This is to become effective at the same time that the 21 MHz band is allocated to the Amateur is given the new 21 Mc band. The change that has been submitted provides for the allotment of 14300-14350 Mc. for expansion of the present 10 m. phone band. As far as to a DX man this change in my opinion is considered to be the most momentous of the inevitable results. This is not a 1.m. phone controversy, nor is it aimed at the A.R.R.L. or any other body. What Amateurs are here up to is the 14300-14350 Mc. and what will happen to the 10 m. band. The Canadian Amateurs now occupy 50 Mc. either side of the U.S. phone band. This is for obvious reasons and it is expected that no change in this line of thought will take place; however, if the U.S. phone band is open to us, we may say the same thing. In the case of the Canadians, what will the Canadians do? Belgian sources have it and logic would indicate that these stations will move to the present part of the c.w. location 14100-14150 Mc. All right you say, what about us? The Canadian Amateurs are in no position to do anything at the moment for want of foreign phone QRM. Now what about the foreign phone man now operating between 14300-14400 Mc.? He will take the only way out he has and move into that part of the band 14000-14100 Mc. and so on. I am not sure, however, what we are driving at? The QRM problem by U.S. and Canadian phone and c.w. will so completely foul our only true DX band that no DX phone or c.w. will be worked by anyone. What do we do about it? Well, I have a few suggestions that could help: (1) Take to every DX man you are about it, over the air or in person; (2) and your foreign contacts what they think about it and have them write their views in a R.E.L. or something like that. Remember those who want your band are busy.”

The best example of QSL card ever sighted by this article, handling well over one million cards, is that of Joe Rodriguez, EASBA. Joe's cards are all hand painted, each with a different and intriguing design and with different colour schemes and layouts. The execution is masterly and yours truly would be proud to own one.

The 144 QTH of VK3QMR, Max Bishop, ex. VK5AMR, is at 12A. Madang, New Guinea. Max is currently active on 14 Mc. and is scheduled to remain in New Guinea for three years, from May, 1950.

GSCU, of Keighley, Yorks, England, with printed “chaser” bursts into view, thus:

“What'shelli'd That QSL?”

“Some moron sent old ole, ole, ole, we had a QSO. Mayhap was short, maybe too long, as other contacts go. But whether it was long or short, I have this much to add.

It gave me just as big a kick as any I have had and there's nothing like it. I don't know where I sent you my QSL card many months ago. Perhaps the postman pinched it or perhaps I'm not quite sane.

So in case you think I'm joking, I am sending this again.

Again I ask you put yr name, dooy no more my place. Just get the lead out of your feet and send that card to me.”

The QSL Manager for the R.E.F., whose Bureau QTH is 72 Rue Marceau, Montreuil sur Seine (Seine), France, advises that owing to the large number of QSL despatches received on which insufficient postage has been deposited, on which all uncollected mail will in the future be refused.

Hil.CB, “Art” Grandinetti, A.P.O. 404, care Postmaster, San Francisco, Cal., U.S.A., supplies the following information regarding his station for the benefit of those desirous of contacting Korea: Operators have been assigned to 144 Mc. G.H.T. daily. Present usage would be 14000, 14050, 14100, 14100 Mc. Art complains he has received but one card from VK and in future only intends to QSL on receipt of card.

A pair in three notes in the April issue of “Amateur Radio” quoted endorsements on cards for AP and VK which were returned by the R.F.C. Bureau instead of being sent on to the A.R.R.L. The Asst. Secretary of the A.R.C.I., who read the passage, has written stating: “We regret that owing to an oversight, the QSL cards for AP were returned to you without your name, which were actually intended for the basis of a letter which our QSL Bureau proposed to write to you informing you that AP2BS is now functioning as the official QSL Bureau for Pakistan, so that Cards could be sent direct to Pakistan and not via India. We are still handling cards for AP separately from VK, as no formal relations exist between the AP and VK Ham in spite of the political differences between our countries. We shall therefore be grateful if you will publish a connecting paragraph so that a misunderstanding may be avoided.”

The motor vessel “Halgard,” bound for the Gilbert Islands via Sava, called at Noumea en route enabling the operator Doug Ken, VK3DR, to meet Felix, PR3AC. Doug has a shed on 7000 Mc. with VK3AW each evening.

NEW SOUTH WALES

The monthly general meeting of the Division was held as usual at Science House, Gloucester St., Sydney, on 26th May, 1950. The newly elected President of the N.S.W. Division, Mr. J. Corbin, STC, took the chair. There was a packed house and the unders had a busy time hunting up chairs for the stragglers.

Among those present were VR3A recently of Fanning Island, VK3AZI (ex-VK4ZL), and VK3JO of Narrabri. VR3A left early in the meeting on a trip to Melbourne, but promised to speak of his experiences on Fanning Island at a subsequent gathering.

Dr. Allison, VK1RA, gave a lengthy and humorous recital of events occurring during his recent period of service in Antarctica, where he was stationed on Heard Island.

Great interest was shown by members and Dr. Allison stated that it might be possible to show Slates taken in that area and give a talk later in the near future.

A vote of congratulation to Mr. J. Corbin, STC, on attaining the Presidency of this Division was moved by “Pop” Trebilcot, ZBM, and was carried by acclamation.

Dr Leo McMahon was the proud recipient of a handsome silver cup presented for his outstanding work and great number of interesting articles written for “Amateur Radio” during the past year. Dr. McMahon, in his reply, pleaded for the gang to send in any novel ideas or articles—no matter how big or small they may be.

It was motioned that an attendance book shall be kept at the entrance hall for the information of members. Voted a splendid idea—the motion was carried. The meeting was closed at 10.45 p.m.

WESTERN SUBURBS

Beard 2WD flat out working some South American calls on 10 m. phone recently. ROQ is tickled pink with his new location at Chester Hill and has

a fine rotary beam in action which is currently knocking them over. Harry runs only 20 watts and says hopes to be in the DX O.C. class. Nice going Harry! TATE is putting out a solid signal with quite good quality phone on 40 metres. SAER “chaser” bursts into view, thus:

“What'shelli'd That QSL?”

“Some moron

“Mayhap was short, maybe too long, as other contacts go. But whether it was long or short, I have this much to add. It gave me just as big a kick as any I have had and there's nothing like it. I don't know where I sent you my QSL card many months ago. Perhaps the postman pinched it or perhaps I'm not quite sane. So in case you think I'm joking, I am sending this again. Again I ask you put yr name, dooy no more my place. Just get the lead out of your feet and send that card to me.”

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ZER with 160 watts, SASF going well for next year's ear-blasting award, very active on 40. ZFA started a comeback on 40 and 10. The salt

A.O.C.P. CLASS

The Victorian Division A.O.C.P. Class will commence on Thursday, 13th July, 1950. Lectures are held on Monday and Thursday evenings from 8 to 10 p.m. Persons desirous of being enrolled should communicate with Secretary W.I.A., Victorian Division, 191 Queen St., Melbourne (Phone FJ 6997 from 10 a.m. to 4 p.m.), or the Class Manager on either of the above evenings.

air is playing up with Peter's beam. 3DS and 2SH not very active, Doug's GSPG is having trouble. 2AWS building new house and 100 watt rig, hopes to be on the air in a month's time. 2AEY active on 40, had a trip to Sydney with 2FA and 2AWS. 2AWL to be continued on 40, 80 and 160. 2AWL installing a new antenna, working winter. 2JO working 40 and 80, attended annual meeting of WLA, and was after Information on the forming of a North Coast and Tablelands Branch of WLA. 2AJT and 2ATL 2AEY and 2ANZ—new nets are being formed. 2AJT and 2ATL are appreciated. 2LHS puts out a good signal with a No. 11 20E active on 10, 20L on 10, 40 and 80, 2TR, 2NT, 2WQ have a 144 M. net working in Gippsland. 2EA also on 10, 40, 80, 160, 200 watts, new 100 watt rig, new house. 2KD on 40 and 80. 2ARY building wire recorder. 2AAP active on 40 and 80. 2EJ staged a comeback and active on 40. 2KJ, 2ADN, 2ARJ, 2AJT Coffs Harbour are re-building.

3AJB built transmitter in rack and panel—active on 40, 80, 160, 200, 240, but active on 40 only. 2WV has a QSO on 10, 40, 80, 160, 200, 240 both ways. 2PA reports working 2E2NR who was on 813 Mc. 2PA on 10, the 2E was using 100 watts to a three element and was 5/5.

HUNTER BRANCH

The Jurs meeting of the Hunter Branch was well attended. The Branch was honoured by a visit from State President, Jim Gorbin, VGY. Vice-Presidents and members of the new Council. The lecture for the meeting was given by Ken Greenhough, 2RG, in the absence of 2ME who had to leave. "Magic in the Service" was the subject, and Ken gave a very interesting description and demonstration. The surprise of the lecture was the playing back of a number of the gang's transmissions—they obtained a fair idea how their signals really sound. Jim Gorbin, 2RG, used to be a Ham in the 1920's, he is doing and like all W.L.A. Secretaries it reflects on the time they can get on the air. The new EK at 2CS is progressing slowly, a metre coil in the Rx though. Lionel tested a 2MT at last broken the ice and is on 40 with a mobile phone, a little 3.5. A is a worry though. 2YU sounds 6.2, too Bill.

2LH on 40 also with QRP phone, it moves often. 2LWU on 10 getting better, on 40 from his amateur location, has got the cash for the Branch. 2ANA putting out the usual callsign on 10, got burnt at work, some "id" working to Nors Ham had switched off. 2NK working to Sydney and other local week-ends. Went to get new meter. 2ETR working 40, 80, 160 and 40 c.w. with an 807 and a nipp. 2LY using double modulation on 40 these days and has some nice clicks c.w. too. Struck some trouble with 70 Mc. H.F. on Council's fm. Neil is unfortunately away in the dunes at the moment, access to the Rx to see what it is all about!

2C's last year's effort in the Trans-Tasman seems to be his last, as the Contest is due to go according to the Federal Convention voting. Another to join up is old timer, 2LU, Lew McDonald. We would like to have a few more meetings. New sig on 10 in Johnstone Clash, 3DZ, 2ND, 2M. 2M, uses three elements and 807s. 2MC still QTR building house and checking electric light meters. 2PQ has the new Rx going 10—7.5 Mc. first, 160 to get into the band. 2TR taking a one on ten frequency. QOF—2TR taking a one on ten frequency. QTH. Better sell up to some Ham first, it is easier than shifting antennae. 2AHS has been on holidays and will give up VFR for some weeks telling everyone he got a couple of new ones and now 137 on 10 metre phono link work. Eru.

2QY only heard on 10 phone and 20 c.w., manages a few QSOs through the QRM. 2ARK back at Mayfield P.O. Very QRIL with disposal gears. 2MM, 2AMM, 2PT and 2ZAM. Welcome to 2ZAM, 2EJ. 2ZAM and 2ZAM in Zone 25, other bloke didn't come across, so Jim is starting out again, snaked another country the total about 180 now. The 20 beam at 2CN taking shape. Another Westerner 2ADH has high hopes for 10 in the Rx, now thinking of getting 20 for 20 as 10 is sick. If you want to hear some good phone listen to 2AAT on 40, 2AAAM at Belmont only active on 40, also with good quality.

The activity on the v.h.f.s. has slackened in the month of April, probably due to the weather. 2H now and again. 2BE has private line to 2ADT on 6 and 2 crossband. 2ADS has the beam working on 16-20 elements amongst the DX too; looks forward to better conditions on 10—40—but when the Hunter Valley Environment Club has another practice and gains more experience, the Net will operate on 6 for their next schedule. Most of the Net members use that band and it is anticipated that the Hunter Valley will even be better covered.

2LH, 700Z, 2BZL etc. of course still emergency frequencies, but most practices will take place on 8.

2XQ has some nice phone using the new modulators, has a good holiday and busy with the net-work. 2TV had out on the 110's, getting all the good dope for the Net members, and the lower 80's. Ask Bob if you want to hear some bad language.

2ADT is a strong supporter of the Net; has been sick and on holidays. Vic GRF hasn't had 100 per cent. either and was missed at the last meet. 2ANL still not on. 2JZ going QSO, gets out well but not happy. 2VU is a sticker for 6, but operates on 16-20, contemplating 40. 2BZL, 2BZL, 2BZL had recently on 80 phone, was I hearing things? 2AHA getting some c.w. DX on 40, mainly European between 1600-1700 hours what's missing on 10, is on 40 now.

COALFIELD AND LAKES

Now is very scarce this month and conditions generally have been very poor with the resultant falling off in activity.

The usual emergency net hook-up in the Hunter Valley took place on the last Sunday in the month.

The Net members are making great progress with their various efforts, and are trying to cut out with the gear under field conditions. Some of the bands are anyway normal and 2AD has often come into its own in supplying a contact. After three years, 2KA has at last been rewarded for his efforts as he has the W.A.R. certificate as arrived from the States. Question 10, 40, 80, 160, So I wonder if he will discard the old two title "sloopy" and 16 wait rig? Expect to be mainly restricted to week-end operation for a while. 2RP moved QTH to a more suitable and was last night of boring out the living room. 2VU is still here with the new microphone. 2YO, the other Ham in the Kurri district, is mainly on 10 phone and has been to Sydney for gear, so it seems there will be some alternative to YO.

2VU talking on a sunset wave change, Rx similar to 2ADT. No news of 2JZ. 2ANL shows up on 80 for the emergency net. 2RU and 2AEZ can be found on 50 Mc., while 2KE is back on again after long holiday. Dave brass that 2GA is also on 10, 40, 80, 160, 200, 240, 280, 320, 360, 400, 440, 480, 520, 560, 600, 640, 680, 720, 760, 800, 840, 880, 920, 960, 1000, 1040, 1080, 1120, 1160, 1200, 1240, 1280, 1320, 1360, 1400, 1440, 1480, 1520, 1560, 1600, 1640, 1680, 1720, 1760, 1800, 1840, 1880, 1920, 1960, 2000, 2040, 2080, 2120, 2160, 2200, 2240, 2280, 2320, 2360, 2400, 2440, 2480, 2520, 2560, 2600, 2640, 2680, 2720, 2760, 2800, 2840, 2880, 2920, 2960, 3000, 3040, 3080, 3120, 3160, 3200, 3240, 3280, 3320, 3360, 3400, 3440, 3480, 3520, 3560, 3600, 3640, 3680, 3720, 3760, 3800, 3840, 3880, 3920, 3960, 4000, 4040, 4080, 4120, 4160, 4200, 4240, 4280, 4320, 4360, 4400, 4440, 4480, 4520, 4560, 4600, 4640, 4680, 4720, 4760, 4800, 4840, 4880, 4920, 4960, 5000, 5040, 5080, 5120, 5160, 5200, 5240, 5280, 5320, 5360, 5400, 5440, 5480, 5520, 5560, 5600, 5640, 5680, 5720, 5760, 5800, 5840, 5880, 5920, 5960, 6000, 6040, 6080, 6120, 6160, 6200, 6240, 6280, 6320, 6360, 6400, 6440, 6480, 6520, 6560, 6600, 6640, 6680, 6720, 6760, 6800, 6840, 6880, 6920, 6960, 7000, 7040, 7080, 7120, 7160, 7200, 7240, 7280, 7320, 7360, 7400, 7440, 7480, 7520, 7560, 7600, 7640, 7680, 7720, 7760, 7800, 7840, 7880, 7920, 7960, 8000, 8040, 8080, 8120, 8160, 8200, 8240, 8280, 8320, 8360, 8400, 8440, 8480, 8520, 8560, 8600, 8640, 8680, 8720, 8760, 8800, 8840, 8880, 8920, 8960, 9000, 9040, 9080, 9120, 9160, 9200, 9240, 9280, 9320, 9360, 9400, 9440, 9480, 9520, 9560, 9600, 9640, 9680, 9720, 9760, 9800, 9840, 9880, 9920, 9960, 10000, 10040, 10080, 10120, 10160, 10200, 10240, 10280, 10320, 10360, 10400, 10440, 10480, 10520, 10560, 10600, 10640, 10680, 10720, 10760, 10800, 10840, 10880, 10920, 10960, 11000, 11040, 11080, 11120, 11160, 11200, 11240, 11280, 11320, 11360, 11400, 11440, 11480, 11520, 11560, 11600, 11640, 11680, 11720, 11760, 11800, 11840, 11880, 11920, 11960, 12000, 12040, 12080, 12120, 12160, 12200, 12240, 12280, 12320, 12360, 12400, 12440, 12480, 12520, 12560, 12600, 12640, 12680, 12720, 12760, 12800, 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—no news again. (Where's "4CH these days?). 4CD developing into a phone hound, much to the disgust of his v.h.f. mates. Cliff reckons he is "solid" gold—he is fourteen stone anyway!

BRISBANE ZONE

Manager 4CX—4XG is holidaying at Surfers' Paradise, using 4UX's portable rig. 4EH pulled the leg of quite a few chaps when he came on the air with really beautiful phone. It later transpired that 4EH had a 400W shock. 4CX is in authority on transcutaneous from one incident. 4CH reckons square holes are best for transplanting. 4HR is interested in 4XG's efforts with holes as he is desirous of putting up rather a nice pole before he goes. 4HR also agreed of a nice pole. Johnson has put up a pole so much that he has worn six inches off the end.

4EB has rather queer noises coming from his rig and can't make out whether it is wasps or a bird trying to get in. Whether it is wasps or not, that works as well as Wally reckons. 4EB is no longer any fox working DX. 4PR has put up the aerial to end aerials. Claude passes his place every day and far has noticed quite a few different aerials. 4XG, 4ZU and 4RT heard working African 180 metres cannot be that Brisbane DX Club again.

4ZA is erecting two 80K and building a house at the same time. He will be willing to bet that house is finished first. He is a nice double convertor amateur and really is a good one. 4HA is firm favourite with Stan, he has finished his shack and reckons that it won't be long now before everything is just, perfect, and regular. 4HA, no sign of Harry these days. 4UX running 100 watts. Claude has just had his dog neutered and has been "eagered to smell the toe of a condenser which had 800 volts on it. The dog left in such a hurry that his shadow is still looking for him.

SOUTH AUSTRALIA

The monthly general meeting for May took the form of a "buy and sell" night and it proved quite success, so much so, that it is intended to hold such a night at least twice a year. Personally I don't think that I have ever seen such a collection of junkers, though I must say that there were no radio gear (not the members) in all my experience of these nights, but it must have been just what the members wanted, because it all disappeared before one could say Edward Barber or some such high-falutin' name. 4VK has not been allowed to hold auctions without a special license, and if we get the license we must engage an authorised auctioneer. Therefore we don't hold an auction and we don't have an auctioneer, we just have a swap meet. There is one auctioneer, and that is none other than Dougal Whithorn (5BY).

We have held several of these evenings over a period of time and I, in company with several others, have never been quite sure as to whether or not the evening has been arranged for the purpose of giving the members a chance to get rid of things to pass on to everybody to throw away at home. Anyway, Dougal was the predominant note of the evening and Dougal's quips and sallies as he tried to talk members into buying (sorry I mean "tendering" good listening).

Apparently some tendered and bought the visitors' items because I couldn't find it all night and therefore have no names or details concerning the visitors. Most members and visitors kept on the move all night, possibly because they were frightened of being asked to pay for too much. Dougal sold them for two bob, though I think I formed the impression that nobody present wanted to tender too much for any one article, as some first-class gear received some ridiculously low offers. Dougal hasn't got the just like an auctioneer (though me, I have said that word again). When Dougal was about to offer a 1500 volt tranny for tender, he said "Take this straight home and go on the air with it." I did just that in the front row said, "and go off the air tomorrow."

The QTR of SWF is beginning to look like Admiralty House with all the aerials and arrays around the place. It is rumoured that he is considering mounting Naval aircraft to defend with the surroundings. "Mine ticket to make plenty good sailor."

5DL was talking to me the other day and was complaining because there were no v.h.f. notes for VK5. I suggested that I did receive many reports of activity for them and he said "I'm very interested in v.h.f. notes, as a matter of fact I never read your notes, my AYL reads them and picks out anything that she likes and puts it with interest notes." Well, 5DL and I do our best to give a lot of what sort of notes that Gove likes best. I will be only too pleased to squeeze as many of his likes to these notes as I can. After all, one does not often receive such complements.

I am still working on Joe's 4XG. I have lately and have caught the fever, so here goes. Here is the thought for the month. Testing is the name that you give to all those adjustments that you do on

the air, but QRM is the name that you call it when the other fellow does the same thing. It's all in viewpoint I suppose. To round it off, I quote, "A man with six children is better satisfied than a man with three because he has six thousand points of trouble, while a man with nine thousand points of trouble, wants more."

The various Council and Executive Officers of the VK5 Division were appointed this month and are as follows: President, Ed Barber (SMD); Past President, H. Austin (2AW); Secretary, O. Bowen (5XL); Treasurer, F. Sorensen (5TY); Assistant Secretary, D. Hosking (5DH); Traffic Manager, J. Kilgiff (5JT); QSL Officer, O. Luxon (5RX); Equipment Officer, F. Wyrwold (5DW); Programme Officer, J. McAllister (5DZ); Publicity Officer, F. Parsons (5PS); J. McAllister concurred with the job that he has had for more years than I care to remember, that of Membership Organiser, and last but not least, J. Price remains the Associate Representative on the Council.

I have temporarily left management on the office of Vice-President until last, because I wish to draw your attention to the importance of this high office. The man chosen as Vice-President must be of high integrity, high moral, a high sense of duty, and above all, high standing in the community. He must have plenty of time, this is not to be taken as a slur on this) and must at all times be able to take the scowling laughter of the mortify and yet remain aloof. Now, I say more. Ladies and gentlemen, I repeat, the Vice-President for SWF is Warwick W. Parsons (5PS). The Vice-President for VK5 is Warwick W. Parsons (5PS). I thank you, I thank you, I thank-you, I thank-you, I thank-you. In reply to the interjection that I have no education, I would like to say that I came through my schooling with flying colours. I am a DXer in building blocks. DXs in plasticine, although I do not do too much. Anyway, joking aside, they all look an energetic bunch and if we are as happy as last year's Council then all will be well.

There seems to be a slight doubt regarding the necessary number of v.h.f. notes from VK5. In the magazine, 5BY has written that the notes from VK5, at that side of the notes from VK5, and I can do no more than quote the remarks of that gentleman at a recent general meeting when quizzed by a member of the Council as to how many v.h.f. notes he was doing on the v.h.f. in VK5. He said "I want to know what they want to hear." Yes I know what is the obvious answer to that one, but tell Bob, don't tell me.

5AJ is due on the 1st to England, in fact he should be there before the 1st. I expect that he will be hearing John with a G call before long. 5CH has certainly been around this month as Claude has been heard on 80, 40, 20 and 15 metres with a very good signal. On the 20th, the Fallon master Claude made a visit to the station, it could not be repaired, but the gesture was appreciated. 5MS is still chasing 20 metre DX and what is more is doing quite well thank you. Steven's three elements are up on 40, 20, 15, 10 too, although he must have felt a little bit shifted in the wind that was in the south east this month.

5TW has had a fairly quiet month, but Tom is grinding his loins in preparation for battle with the winter DX. Will someone tell me when it is around? The winter DX I mean. 5EKO has been up in the winter months, and has been heard on 10 and 15 metres. The fine weather was suitable for gliding and that suited "Eko." 5FD does not permit anybody to catch up with him whilst in his Holden, so he has nothing to report regarding John, except that he has been in touch with him and is still with him. 5CQ would have me believe that work always comes first with him also, but he managed to give 2 and 40 metres the once over. How's the family?

Received the April copy of "Splatter" and it gets better and better each copy. This little publication is a credit to all concerned and I am taking the liberty of sending it to the Editor of the magazine to show him what VK5 can do. Once again congratulations 5VJ, and keep up the good work.

Hear'd a VK5 Ham complaining of the poor conditions existing on 20 at night and he said that he had been unable to copy with listening on that band. Another Ham presented him with a listen on 10 metres between 5.30 and 6.30 p.m. to a certain station who was apparently operating from his living room, and it was suggested that he would not be bored with the entertainment provided. He had a good laugh, but when I asked him if he had been bored with his own station, I can definitely say that I was not bored with my night's listening. The first night I helped the AYL with the operation to prepare the evening meal, the other things, like unpacking, washing up, etc., were the same, although why the responsible person has allowed to them as "unay" is still puzzling me. After ten we all had a "heat" game of snakes and ladders, but only after we had done our homework. I am sure that my answers to the arithmetic questions did not tally with some of the harmonic). I became quite annoyed during the snakes and ladders when I was on 93 and threw a six and old down a ladder to 42, and missed you. I was so annoyed that I had to quit, so when they caught me cheating, but the cuff behind the ear that one of my fellow players collected sounded a bit severe.

Another night we had three female visitors and the operator was calling CQ DX did we have a lovely gossip, well I am not one to talk, but! A late night visitor had a slight difference of opinion with the operators DX, so either or not she could buy him a beer, and either or not he would be weakening once or twice I am glad to say that we firmly said NO! We have visitors coming next week and I am feeling quite excited because I have never met them, but I believe that they will be to work with the operators. I am sure she was married, I can hardly wait. Just think only three more sleeps and then they will be there. You think that I am kidding? OK, have a beer, I am serious, he is using heavy compression and all the background noise comes up and hits you in the face.

In company with all other famous journalists I always make my notes in general or council meetings, and in the board of directors meetings sometimes I and it hard to decipher. This may be because I am worried with some notes I made at the last Council meeting. For the life of me I can't make out what I had in mind when I wrote, "Two dogs are better than one to supper after the meeting." Now what could that mean? I must ask "Doc," he might know.

There is a suggestion that the new general meeting will be asked to consider making our retiring Secretary, Warwick (5DW), an Honorary Life Member of the VK5 Division of the R.W.L.A. in recognition of his untiring services to the Division. In view of all he has done in the past for Ham Radio in this State, I don't think that there will be any objection to this. I am considering the matter, as feeling should be unnameable. I said the unfriendly way last month, a finer Ham has never pressed a key or used a microphone in VK5, if not in VK.

5WD has become of the terrible twins of 5W and 5MX? They were a wise a time, when one could tune into twenty and if the two Johns weren't on, there no further need was wasted in listening for any signals, the band could be taken as a whole. I wonder if they have migrated to 3 metres, but I cannot verify this. Come out, come out, wherever you are.

5DK has bobbed up on 20 metres operating from the Ton H Club Rooms at Henley Beach.

Both 5WF and myself went out of our way to tell him the conditions were not on that band, and that he would like the band, but he had to find out for himself. We hope that all his fowls die!

Associate member Bob Turner is at the moment in a R.A.F. Hospital in VK5 recovering from an operation. I believe that he had rather a bad time and was all the time in considerable pain, but made good progress (especially my daughter). I thought she was good enough when he was around the place, but since he has been in VK5, well all I can say is that John, Leon, and myself, from my nearest relatives and I will take care of you.

I quote the following from "Splatter," "Castford (5XL).—On April 3 at Clare and District Hospital, to Vera and Lance, a son." Congratulations to you both from all down here, and sorry to be so late with the news. Listen but you fellows are so close with your news up there that it takes us two for me to catch up with you. My XYL likes the name too. Adrian Jeoddy, although she says that Vera will have her hands full with two Hams in the house later on.

Hear'd 5JK the other night putting in a surprise appearance. I heard him on 10 metres and he was heard commenting later on that there was evidently another source of local QRM at Henley Beach. Jack has to rise very early in the mornings and it prevents him from being on the air at night, to get the best DX. I would like to be the first to admit that he has had professional experience on the mike, he is still an object lesson to all "ummers and even" on the concise and efficient open and shutting of the mouth in front of a microphone.

A little birdie tells me that a number of complaints are arriving from interstate sources regarding bad splatter on VK5 phone signals. Personally I am not sure, but what does surprise me is that they should be having problems with VK5, as they are splattering after the report comes from Interstate. If they hear it over there, it sure is SPLATTER.

5WV returned from his trip Interstate full of good cheer and other commodities, the principal being only two new pipes; two pipes mind you, as if one didn't titrate well enough! Harry Vostreboff (5RW) has at long last received his amateur licence and is presently felling in the Upper Murray district. He is running a pair of 5WVs in a pair of 875s in the Seal, modulated by a pair of the same tubes in Class AB2; receiver is a nine tube home-made job, and the lot is mounted in a rugged looks quite professional. Welcome to the air Harry.

5BC is building a v.t.o. unit using the well known "Clapp" circuit and using a built-in power supply. He is very pleased with stability, but I suggest that he should add a bypass filter across the tank and stands the v.t.o. alongside said pot and the stability will be even better. The tea he usually makes is strong enough to hold anything to the

straight and narrow. SMA is back from holidays and has been seen sneaking into his shack when his XYL was not looking. His activities are mainly confined to 50 Mc. and has been revamping a dipole receiver for that band. SMA has not yet appeared and I smoke for months at a time. pleasure of seasonal work is probably the answer, but he will be back, never you fear, they can't resist it!

SBL has almost completed his converter and results so far are well up to expectations, although he is still busy in his off-duty hours making the parts. In fact, he is not the type for much Ham Radio. Of course, there is also the finance, you little devil "Slimy". SBL is busy building gear but will not be on the air for some time yet. He is getting rich quick on the side. Look out, what you may not know doesn't both become the richest man in the cemetery. SWM has returned from the second best h.c. station in VRS after a spot of relieving duties and I believe that the boys up there are doing well. They have these days fewed out "the lot that you Wick, wacky pie". What has he got that I haven't had longer? I think that I must do a spot of relieving duties up there; what am I saying!

WESTERN AUSTRALIA

The May meeting showed a few of the newer call signs getting an airing. Been among an average gathering such comparative strangers as CDB, GJB, SAP and SHG. A new member in GYV was approved and, together with old-timers SAE, was welcomed to the amateur ranks. The principal item of business for the evening was a report from the new Co-Opted Committee given by GDU in the absence of the Chairman, CDB. Jim dealt at some length with future co-Opted activities in VGS and concluded that the first co-Opted meeting will be conducted in the coming year. The first will be the popular 40 metre "Scramble" to be held on 30th June (the echoes should be just about dying down by the time you read this) and a full program of other events of amateur interest from 50 to 2 metres or even higher!

The Dinner Committee reported favourable progress for the big event on 9th June (By now only a memory, I hope it is a pleasant one). Indications at the time of writing are for a good evening with better support than from any previous meeting. There will be prizes for the top three people to be awarded to the first three place-getters in the "Scramble". First will receive the 1950 President's Trophy which GJW assures me will be well worth the winning. A special prize in this contest will be GJW's prize of one guinea for the best performance on a "miles-per-watt" basis.

PERSONALITIES

I think I shall stick to Ham Radio as a hobby. Look how well the old-timers are wearing over the years—superb! I am looking forward to many more sprightly as ever, give members an interesting talk on his recent trip around the Eastern States.

Credit is due to whoever thought up the idea of putting on a 20th Convention on the wire for the 1950 meeting. The 1950 Convention will be held on May meeting per medium of GJW's recorder and gave an intimate and interesting sidelight to the Convention. The quality and continuity were excellent and we were really "in the room".

Tony, who had about mentioned last month as being in BMT, turned up at the meeting and took a keen interest in the proceedings. Where to next? Leo? Could it be Cus at last? Before I go any further, I must say, hold on, here comes this will be my last effort as I am handing over to GAS. Alec Smith, beginning next month. Alec will also handle the 6W1 broadcasts as soon as he can get the new antenna gear rigged up at his QTH. My only real change of occupation involving a possible change of QTH.

GJW has come back to 40 metres with a signal

from Bumby and has been renewing old acquaintances over the air. SWA is a pleased man these days, having just sold his 1000 watt rig for hardly 40 watts. Not bad for d.c. mains! Harry has lately discovered a latent talent for gardening (or perhaps the XYL found it for you!) and his garden is gradually to benefit considerably. Another Ham will be moving from Tulling the soft soil is EXG down Katalina way.

Hams collect various types of junk in their pursuit of their favourite hobby, but one of the strangest was heard on 40 the other day: SLU was heard telling D.J. of a bunch of tooth-brushes and some pieces of plastic pipe. He had gathered and was going along. Sothly kindly reviewed the use of dashes as spacers on an antenna feed line. It's an idea! The plate glass took the place of the centre insulator, up till then a lowly oil-bottle! Who said the modern Ham was losing his inventiveness?

Remember the last Ham of Geraldton, GUN, who has been without power for months. Tired of waiting for permission to evacuate, Cyril is now investigating the possibilities of a battery operated

rig. SAE deep in contemplation of plans for his new shack which he hopes to complete during his forthcoming holidays. Heard another newcomer to the Ham fraternity on 40-60Y, complete with a long Scots accent, welcome, to VFR Tom. The weather has been improving showing signs of winter improvement these days with more and more stations appearing on the band. One station which really had the 40 metres regularly passing was GSW coming out of hibernation with a QTH v.t.o. and working to Geralton. GSW has been the first one to stage a comeback. GSW was seen working on a nifty looking portable 7 Mc. set-up using a 6.6 g.p.d. oscillator with modulator complete.

SWH has taken to the country touring business and I understand he turned up in Albany the other day. Also heard checking his rig on 40-60Y, with a very good antenna. GUN, good again, GUN, could all this activity anger well for our 7 Mc. "Scramble"? Another "Bumbersong" advocate is GDU up at Boulder who swears by the rotary control to provide the very necessary a.c. from the non-a.c. end of GDU's rig running a pair of 811s on ten, but Frank finds it a bit hard to drive. Well, I hope you all have (or had) a good time at the dinner. This business of writing about things before they happen is bound to be read after they've happened!

SHD down at Minden has been working steadily at his favourite hobby. Eric now has a fine new beam for ten metres and to go with it he has a turreted switched transmitter. Spotted a 6S ft. tower in the backyard of GJW. Hope it's soon in a working condition. Eric is a good friend of mine. Helped Alex, GAS, to establish the SWI 7 Mc. rig in his QTH an expect to hear more of Alex on that band. If he is going to take over these notes, he will have to keep going on 40 anyway. Heard SLOW down at Busselton, via from up Bowral way and putting quite a fair signal down into the Metropolitan area. Well, I guess that's the issue so 73 to all.

TASMANIA

NORTHERN ZONE

The King's Hall, Launceston, 15th May, presented a very welcome sight by being the last attended meeting for some time. I suspect that quite a few came in as enthusiasts to ascertain whether or not it would be necessary to water the lawn on Saturday. The lecture was by Mr. Scowan from the airport at Westbury. An excellent speaker, unfortunately unprepared specifically designed to give food for thought for 144 Mc. predictions. To this end Mr. Scowan succeeded admirably and, even though we do not know exactly when to slap the eggs on 12 metres, we now have a good start. He also gave a few weather charts and it will be most interesting to compare future openings with details from the weather man. We are very grateful to Mr. Scowan as indeed we are to all the lecturers who give up their time in the interests of amateur radio. Some of them know their stuff and some don't. Also it is most fitting that on these occasions we have such large gatherings, please keep it up. Incidentally, the weather man said that Saturday should either be showery or dry, so I think we'll be all right.

Activities have been somewhat desultory this month, due possibly to our blustery blank cold weather—if this is the best the going on Macquarie Island can send up to us, I won't work a VK1 again, or will I? Believe TIBQ has not been enjoying the best of health of late, but I trust that ere this is printed, his recovery is complete. TIBQ seems to have deserted 7 Mc. and maintains a deep silence, to my ears anyway. Let's hear from you Chris, juggle the shunts or something and hop across to some Friday night meeting.

TAB should be showing up more chunks out of the ether around 7 Mc. way by print time as he tells me of 100 watts and an 813 and the re-erection of mast, etc. Even went to the trouble of getting a new antenna. I wonder if he thought TIBQ had left his engine in the wide open space of his impression being, I believe, the case of erecting rhombics on all the decent DX spots. I'll bet that even then the best conditions would still be obtained by launching a 1000 watt 7 Mc. breaching dive, thrills against me for me to borrow the real gods from the football club for his antenna but, on looking through the sports column, they only seem to need the little ones anyway.

TYP seems to have successfully cleaned up the little troubles that beset us all at times and as my QTH the signal is OK. Keep it that way Peter and your feet won't get wet. TDB still very quiet, but I expect not much change for Ham radio, but it will keep, Don. Heyo my single 807 became loopy so I gave it a male, but it looks like incompatibility as they won't behave on 10 yet—well, maybe there's a lot to be said for single ended triodes.

Our next meeting is scheduled for 14th July. I wonder if some kind bird would whisper that date into the shell like pink ear of our State QSL Manager. Oh yes! At the end of para one. It was a beautiful, sunny, cloudless day!!!

CORRESPONDENCE

The opinions expressed in these letters are the individual opinions of the writer, and do not necessarily coincide with those of the publishers.

WARNING TO AMATEURS

4 Sunbeam Ave., Croydon, N.S.W.

Editor "A.R." Sir,

I would like you to publish the following: On Tuesday night, 9/5/50, my shack was broken into and my Sunbeam Receiver was stolen. The thief was gained by breaking away the fibro concrete sheets near the ground. I would like to suggest that Hams line the inside of their shacks or screen hardware battens every foot or so up from the ground. All normal VHS Ham shacks are likely to have less valuable gear in similar circumstances.

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CHARLES LUCKMAN, VK3JT.

HAMADS

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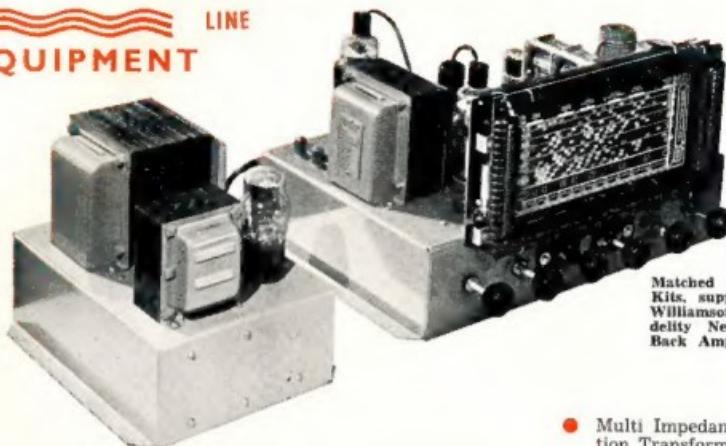
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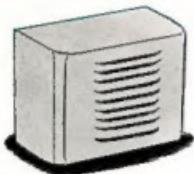
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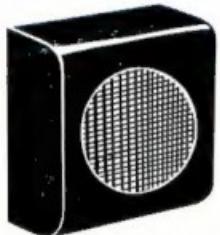
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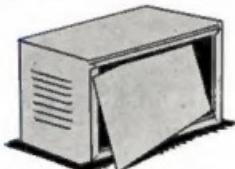
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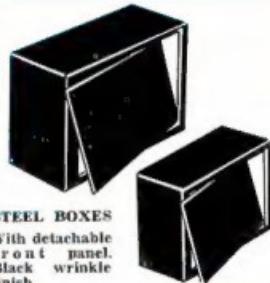


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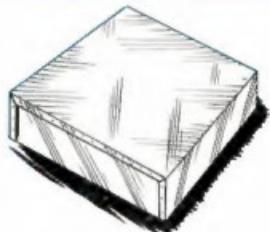
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